Mucool Experimental Mode in MTA

	H3	Na22
K(atom/star)=	0.075	0.02
L=	0.9	0.135
Rho(soil)=	2.25	2.25
w=	0.27	0.52
Factor-ave=	1.59E-19	1.41E-20

SmtoSa= 0.019
dpmtoCi= 1.17E+06
*Save(star/cc-p)=
*Smax(star/cc-p)= **1.61E-09**
Hydro-xport R(Till)= **6.30E-09**
Tirr (yr) = **1**
Tbeam-off (yr) = **1**

	H3	Na22
Buildup	5.47E-02	2.34E-01
t1/2(yr)=	12.33	2.602
Lambda=	5.62E-02	2.66E-01
Decay=	9.45E-01	7.66E-01

	Tritium		Sodium		% of Total Limit	
Protons/year	C-initial (pCi/cc-y)	C-final (pCi/cc-y)	C-initial (pCi/cc-y)	C-final (pCi/cc-y)	Surface	Aquifer
6.70E+20	107	6.71E-07	9.5	5.96E-08	100.0%	0.000%

Protons/year arbitrarily chosen to meet surface water limit. Represents nearly 4800 pulses per hour continuously.

Star density estimate from I. Rakhno 7 April 2010 is 430 stars per cm^3 per second, assuming 1.6E13 protons per pulse and 1 pulse/min.
Since underdrainage is flushed with collected water, only first year of surface discharge limit is considered.
The apparatus, a high-pressure RF cavity upstream of a thick absorber, is an example of a typical experimental device.

	Name/Date	
Originated	W. Higgins	7-Apr-10
Checked		
Approved		